

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.-7 (Canceled)

8. (Previously Presented) A crystal of *Helicobacter pylori* (*H. pylori*) glutamate racemase (MurI) of SEQ ID NO:2 complexed with a glutamate substrate wherein the substrate binding site of *H. pylori* MurI comprises amino acid residues: Ser8, Cys70, Thr72, Thr116, Thr119, Glu150, Cys181, Thr182, and His183 of SEQ ID NO: 2.

9. (Previously Presented) A crystal of *Helicobacter pylori* (*H. pylori*) glutamate racemase (MurI) of SEQ ID NO:2 complexed with a glutamate substrate wherein the intermolecular dimer interface of *H. pylori* MurI comprises amino acid residues: Ser34, Ala35, Arg36, Val37, Pro38, Tyr39, Gly40, Thr41, Lys42, Asp43, Pro44, Thr46, Phe50, Lys117, Asn121, Ser143, Leu144, Pro147, Leu148, Glu150, Glu151, Ser152, Ile153, Gly157, Leu158, Thr161, Cys162, Tyr165, Tyr166, Ser239, Gly240, Asp241, and Trp244 of SEQ ID NO: 2.

10. (Previously Presented) A crystal of *Helicobacter pylori* (*H. pylori*) glutamate racemase (MurI) of SEQ ID NO:2 complexed with a glutamate substrate wherein the intradomain interface comprises amino acid residues: Asp7, Ser8, Gly9, Val10, Gly11, Gly12, Phe13, Ser14, Val15, Ser18, Lys21, Ala22, Val37, Pro38, Tyr39, Gly40, Thr41, Lys42, Asp43, Pro44, Ile47, Ala69, Cys70, Asn71, Thr72, Ser74, Ala75, Leu76, Gly91, Val92, Gly211, Asp212, Ala213, Ile214, Val215, Glu216, Tyr217, Leu218, Gln219, Gln220, Lys221, Glu251, Trp252, Leu253, Lys254, and Leu255 of a first domain, and amino acid residues Ile93, Glu94, Pro95, Ser96, Ile97, Leu98, Ala99, Ile100, Arg102, Gln103, Thr116, Lys117, Ala118, Thr119, Ser122, Asn123, Ala124, Tyr125, Ala128, Gln131, Gln132, Ser143, Val146, Pro147, Ile149, Glu150, Glu151, Ser152, Ile178, Leu179, Gly180, Cys181, Thr182, His183, Phe184, Pro185, Leu186, Ile208, His209, Ser210, Gly211, and Asp212 of a second domain of SEQ ID NO: 2.

11. (Previously Presented) A crystal of *Helicobacter pylori* (*H. pylori*) glutamate racemase (MurI) of SEQ ID NO:2 complexed with a glutamate substrate and an inhibitor wherein the inhibitor binding site comprises amino acid residues Val10, Gly11, Phe13, Ile149, Glu151, Ser152, Leu186, Trp244, Gln248, and Trp252 of SEQ ID NO: 2.

12.- 47. (Canceled)

48. (Previously Presented) A crystal of *Helicobacter pylori* glutamate racemase (MurI) complexed with a glutamate substrate comprising the monoclinic space group $P2_1$ and has cell dimensions of $a = 59.20 \text{ \AA}$, $b = 82.40 \text{ \AA}$ and $c = 106.50 \text{ \AA}$, wherein $\alpha = 90^\circ$, $\beta = 92.15^\circ$, and $\gamma = 90^\circ$.

49. (Previously Presented) A crystal of *Helicobacter pylori* glutamate racemase (MurI) complexed with a glutamate substrate comprising the monoclinic space group $P2_1$ and has cell dimensions of $a = 52.28 \text{ \AA}$, $b = 78.96 \text{ \AA}$ and $c = 59.14 \text{ \AA}$, wherein $\alpha = 90^\circ$, $\beta = 92.64^\circ$, and $\gamma = 90^\circ$.

50. (Previously Presented) A crystal of *Helicobacter pylori* glutamate racemase (MurI) complexed with a glutamate substrate comprising the monoclinic space group $P2_1$ and has cell dimensions of $a = 52.02 \text{ \AA}$, $b = 80.66 \text{ \AA}$ and $c = 59.18 \text{ \AA}$, wherein $\alpha = 90^\circ$, $\beta = 92.65^\circ$, and $\gamma = 90^\circ$.

51. (Previously Presented) A crystal of *Helicobacter pylori* glutamate racemase (MurI) complexed with a glutamate substrate comprising the monoclinic space group $P2_1$ and has cell dimensions of $a = 52.61 \text{ \AA}$, $b = 78.40 \text{ \AA}$, and $c = 59.43 \text{ \AA}$, and wherein $\alpha = 90^\circ$, $\beta = 92.33^\circ$, $\gamma = 90^\circ$.

52. (Canceled)

53. (Canceled)

54. (Previously Presented) A crystal of *Helicobacter pylori* glutamate racemase (MurI) complexed with an inhibitor and a glutamate substrate comprising monoclinic space group $P2_1$, and having cell dimensions $a = 57.1 \text{ \AA}$, $b = 78.0 \text{ \AA}$, $c = 58.55 \text{ \AA}$, and $\alpha = 90^\circ$, $\beta = 97.91^\circ$, and $\gamma = 90^\circ$.

55. (Previously Presented) A crystal of *Helicobacter pylori* MurI complexed with an inhibitor and a glutamate substrate comprising the monoclinic space group $P2_1$ and has cell dimensions of $a = 62.9 \text{ \AA}$, $b = 81.8 \text{ \AA}$, and $c = 113.6 \text{ \AA}$, and wherein $\alpha = 90^\circ$, $\beta = 90^\circ$, $\gamma = 90^\circ$.

56. (Canceled)

57. (Previously Presented) A crystal of *Helicobacter pylori* glutamate racemase (MurI) complexed with a glutamate substrate represented by the structure coordinates in Figure 5.

58. (Previously Presented) A crystal of *Helicobacter pylori* glutamate racemase (MurI) complexed with a glutamate substrate and inhibitor represented by the structure coordinates in Figure 6.